

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. Cancelled
2. Cancelled
3. (Currently Amended) A ~~processing~~ method for processing of a silicon wafer, including comprising:
 - ~~an etching process (13) storing acid etching solution and alkali etching solution in plural etching tanks, respectively, and immersing~~ subjecting a cleaned, lapped silicon wafer having degraded superficial layers to
 - ~~an etching process gone through a cleaning process (12) subsequent to a lapping process (11) into~~ with an aqueous the acid etching solution and an ~~the~~ alkali etching solution ~~in order to~~ obtain an etched wafer,
 - a front surface mirror-polishing process ~~(18)~~ to mirror-polish one surface of said etched wafer, and
 - a cleaning process (19) to clean ~~said~~ the front surface mirror-polished wafer,
 - wherein said etching process ~~(13)~~ is a process in which the alkali etching is performed after the acid etching, and
 - wherein the acid etching is performed by a spincoating method, in which the acid etching solution is dripped on the silicon wafer, and said wafer is spun so that said dripped acid etching solution is expanded on the whole wafer surface,

wherein the alkali etching is performed by immersing the silicon wafer into the alkali etching solution, and

wherein said aqueous acid etching solution is mainly composed of hydrofluoric acid and nitric acid, and contains phosphoric acid in an amount equal to or more than 30 percent by weight, based upon 100 percent by weight of the aqueous acid etching solution ~~in the acid aqueous water solution 100 percent by weight mainly composed of hydrofluoric acid and nitric acid.~~

4. (Currently Amended) The ~~processing~~ method according to claim 3, further including a rear surface slight-polishing process ~~(17)~~ to polish a portion of the unevenness of the wafer rear surface formed by said etching process ~~(13)~~ between the etching process ~~(13)~~ and the front surface mirror- polishing process ~~(18)~~.

5. (Currently Amended) The ~~processing~~ method according to claim 3, wherein, ~~when~~ the acid aqueous acid water etching solution ~~mainly composed of hydrofluoric acid and nitric acid is made 100 percent by weight, said acid aqueous water solution~~ contains phosphoric acid in amount of 30 to 40 percent by weight, based upon 100 percent by weight of the aqueous acid etching solution.

6. Cancelled.

7. (NEW) The method according to claim 3 wherein the acid etching solution and the alkali etching solution are stored in separate etching tanks.

8. (NEW) The method according to claim 3 wherein a cleaning process is performed between the acid etching process and the alkali etching process.

9. (NEW) The method according to claim 4 wherein a cleaning process is performed after the alkali etching process but before the rear surface mirror-polishing process.

10. (NEW) The method according to claim 8 wherein a cleaning process is performed after the alkali etching process but before the front surface mirror-polishing process.

11. (NEW) The method according to claim 4 wherein the rear surface slight-polishing process removes the rear surface less than 1 μm .

12. (NEW) The method according to claim 4 wherein the rear surface slight-polishing process removes the rear surface less than 0.3 μm .